

REMARKS

Summary Of The Office Action & Formalities

Claims 1-15 are all the claims pending in the application. By this Amendment, Applicants are amending claim 11. No new matter is added.

The Examiner requires Figure 1 to be labeled as "Prior Art." A proposed drawing correction is submitted herewith for the Examiner's approval.

For the English language abstracts corresponding to Japanese publications listed on form PTO-1449 submitted on April 5, 2001 and struck through by the Examiner, the Examiner requires Applicants to identify the abstract by source, date, etc. *See Office Action at page 5.* Applicants are submitting herewith a revised substitute PTO/SB/08 A & B (modified) identifying the Japanese abstracts with the best information available to Applicants. The Examiner is kindly requested to initial by these references.

Claims 1-9 are allowed.

Claims 11-15 are rejected under 35 U.S.C. § 112, first paragraph, because the Examiner takes the position:

Claim 11 contains the limitation of "further conveying the preform through the furnace" (4th to last line). Applicant's response does not give any indication of where there is any support for the limitation. Examiner read through the specification and could not find any support. The only possible support would be from the drawings because the bottom opening would be large enough to accommodate the preform. However the furnace 4 is clearly only a schematic representation of the furnace. When the reference does not disclose that the drawings are to scale and is silent as to dimensions, arguments based on measurement of the drawing features are of little value. *See Hockerson-Halberstadt, Inc. v. Avia Group Int'l, 222 F. 3d 951, 956, 55 USPQ2d 1487,*

1491 (Fed. Cir. 2000) (The disclosure gave no indication that the drawings were drawn to scale. “[I]t is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.”).

Most importantly (as can be seen from Orita 6192715 and Klop 4309201) one of ordinary skill routinely uses a small opening at the bottom of the furnace that would not permit the accommodation of something the size of a preform. One of ordinary skill would normally not use a furnace with such a large opening, because that would permit gases to readily enter/exit the furnace and make temperature/contamination control more difficult. One of ordinary skill reviewing the present application as originally claimed would not reasonable contemplate that Applicant possessed the idea of using a furnace and preform such that one can pass the preform “through” the furnace. It appears that the limitation was added simply to overcome the Nicholson invention which would not permit a preform to pass through the bottom furnace.

Office Action at page 3. Applicants are amending claim 11 to recite “for further conveying the preform body within the furnace.” Applicants believe this minor amendment addresses the Examiner’s concern regarding support in the original disclosure. Applicants also note that the recitation “through” in claim 11 was not added to overcome Nicholson et al. Rather, claim 11 is allowable for reasons similar to those set forth in support of claim 1. For example, clearly the furnace assembly of Nicholson et al. does not include an inlet arrangement which includes the first seal and a closure member disposed above the injector as recited in claim 11.

Moreover, even if the Examiner now takes the position that Nicholson et al. discloses an injector downstream of the closure member (*see rejection of claim 10 below*), it is clear that this alleged injector is not disclosed as being part of the inlet arrangement, let alone *between* this arrangement and the furnace as required by claim 11. (*Note*, claim 11 recites: “a furnace located

downstream of the inlet arrangement,” which requires the furnace to be located downstream of the injector.)

Nicholson et al., on the other hand, explicitly discloses that the inlet/exit pipe 25 is at the downstream end of the Chamber C (*see* column 9, lines 1-6). There is no teaching or suggestion to include such an inlet/exit pipe *as part of an inlet arrangement* that precedes the furnace, and which the Examiner alleges to be everything upstream of metal flange 21.

Claims 12-15 are allowable by reason of their respective dependencies, in addition to being allowable by reason of the additional subject matter recited in each of these claims.

Claim 10 is rejected under 35 U.S.C. § 102(b) as being anticipated by Nicholson (USP 5,713,979).

Applicants respectfully traverse the prior art rejection.

Claim Rejections - 35 U.S.C. § 102

1. Claim 10 In View Of Nicholson.

In rejecting claim 10 in view of Nicholson, the grounds of rejection state that

The invention is shown on figure 1. Everything above (and including feature 21) comprises the “arrangement”. The top of 8 is the inlet. The bottom of 21 is the outlet. The first conveying path is the path from the inlet to the outlet. Feature 8 has the seal (col. 8, line 10). 11 and/or 10 comprise the closure member. The injector is discussed as per the paragraph spanning cols. 8-9. It is inherent that some injector is needed to introduce the process gas into furnace B.

Office Action at pages 2 and 3. Applicants respectfully disagree.

Claim 10 requires an inlet arrangement that includes the following elements in a downstream sequence:

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- a first seal;
- a closure member located downstream of the inlet and between the first seal and the outlet, the closure member selectively moveable between a closed position that closes and seals the first conveying path and an opened position that opens and unseals the first conveying path; and
- an injector located downstream of the closure member and between the closure member and the outlet

At a minimum, Nicholson et al. does not teach or suggest an inlet arrangement which includes the first seal, a closure member and an injector, with the first seal and the closure member disposed above the injector.

The Examiner takes the position that Nicholson et al. *inherently* discloses an injector “as per the paragraph spanning cols 8-9,” because “it is inherent that some injector is needed to introduce the process gas into furnace B.” Office Action at pages 2-3. Nicholson et al. states:

Means may be provided to introduce inert and/or process gas into furnace B, and/or to chamber C, or alternatively to connect these components to the vacuum system. *These possibilities are represented schematically in FIG. 1 by a single inlet/exit pipe 25, fitted with a valve 26, but alternative pipework arrangements, not shown, are clearly possible.* Appropriate water-cooling of chamber C is provided, for example by a cooling pipe 27.

Nicholson et al. at column 8, line 66 to column 9, line 6 (emphasis added).

Even if the Examiner now takes the position that Nicholson et al. discloses an injector downstream of the closure member, it is clear that such an alleged injector is not disclosed as being part of the *inlet arrangement* as required by claim 10. Rather, as quoted above, Nicholson

et al. *explicitly* discloses that the inlet/exit pipe 25 is at the downstream end of the Chamber C, and therefore, not part of the alleged inlet arrangement. There is no teaching or suggestion to include such an inlet/exit pipe *as part of an inlet arrangement*, which the Examiner alleges to be everything upstream of metal flange 21. While the reference states that “alternative pipework arrangements, not shown, are clearly possible,” it give absolutely no guidance where and how to include the alternative arrangement, and is, therefore, no more than an unguided invitation to experiment. Indeed, to the extent that the reference discloses the single inlet/exit pipe 25, fitted with a valve 26, at the *end* of chamber C so as not to interrupt the insulation and uniformity of this chamber, one skilled in the art would likely be motivated to maintain this arrangement or a substantially similar arrangement. Therefore, Nicholson et al. cannot be relied upon to anticipate the invention recited in claim 10.

Furthermore, the present invention as recited in claim 10 is for “drawing a fiber,” whereas Nicholson et al. deals mainly with sintering a preform (see abstract and column 10, line 20, and titles of examples 1 to 4).

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Submitted herewith is a Petition For Extension Of Time with fee and an Excess Claim Fee Payment Letter with fee.

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Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



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PATENT TRADEMARK OFFICE

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APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

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IN THE CLAIMS:

The claims are amended as follows:

Claim 11. (Amended) An apparatus for drawing a fiber, comprising:

a preform body;

an inlet arrangement, comprising:

an inlet;

an outlet downstream of the inlet,

a first conveying path through the inlet arrangement extending from the inlet to the outlet, the first conveying path for conveying the preform body from and through the inlet to and through the outlet;

a first seal;

a closure member located downstream of the inlet and between the first seal and the outlet, the closure member selectively moveable between a closed position that closes and seals the first conveying path and an opened position that opens and unseals the first conveying path; and

an injector located downstream of the closure member and between the closure member and the outlet, the injector for injecting a gas into the first conveying path of the inlet arrangement; and

a furnace located downstream of the inlet arrangement and having a second conveying path aligned with the first conveying path for further conveying the preform body [through] within the furnace; and

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wherein the closure member, when in the closed position, seals off the injector and the furnace from the first seal.